

EXECUTIVE SUMMARY

This Draft Environmental Impact Statement / General Management Plan evaluates alternative management approaches for Death Valley National Park in the northeastern Mojave Desert of California and Nevada. Death Valley was redesignated as a national park on October 31, 1994 through the passage of the California Desert Protection Act (CDPA). Congress expanded the previous Death Valley National Monument by 1.3 million acres, designated 95% of the area as wilderness (3,158,038 acres), and designated the unit a national park. This DEIS is one of three documents prepared by the Northern and Eastern Mojave Planning Team as part of an interagency coordinated planning effort. The team also is preparing a draft General Management Plan for Mojave National Preserve and a California Desert Conservation Area Plan amendment for the Bureau of Land Management (BLM) lands. All three documents are anticipated to be release for review at about the same time; however, the BLM plan amendment may be distributed somewhat later.

As a recently expanded unit of the national park system, the park's existing management plans are outdated. This planning effort will produce a general management plan that will serve as the overall management strategy for the next 10–15 years. More detailed activity or implementation plans will be prepared under this plan. The *General Management Plan* is general in nature, rather than specific, and focuses on purposes of the unit, its significant attributes, its mission in relation to the overall mission of the agency, what activities are appropriate within these constraints, and resource protection strategies. It also provides guidelines for visitor use and development of facilities for visitor enjoyment and administration of the unit.

The impetus for this plan was the passage of the California Desert Protection Act on October 31, 1994. This act transferred over 3 million acres of the California Desert from the Bureau of Land Management to the National Park Service and designated nearly 8 million acres of wilderness on NPS and BLM lands. In addition, the CDPA created the Mojave National Preserve and redesignated Death Valley and Joshua Tree National Monuments as national parks. Changes in the management of the public lands in the California desert, including listing of the desert tortoise, increasing development, public use pressures, and passage of the CDPA, caused NPS, BLM, and Fish and Wildlife (FWS) desert managers to address the anticipated changes in management of these federal lands by looking at management issues beyond traditional boundaries. Three sub-regional planning teams were established in the desert region of southern California: the West Mojave Plan (WMP) in the western Mojave Desert, the Northern and Eastern Mojave Planning Effort (NEMO) in the northern and eastern Mojave Desert, and the Northern and Eastern Colorado Planning Effort (NECO) in the northern and eastern Colorado Desert. These teams would gather information, define issues, and develop methods for issue resolution. The National Park Service, which manages most of the land in the northern and eastern Mojave Desert, took the lead for the NEMO interagency planning effort. The other participating agencies are the Bureau of Land Management and the U.S. Fish and Wildlife Service (FWS). The Bureau of Land Management is the lead for the West Mojave Plan and the Northern and Eastern

Colorado Planning Effort. The planning region boundaries for all three areas will cease to exist when the planning efforts are completed.

The NEMO planning team conducted twenty public meetings in September 1995 and April 1997 to gather public input on the management direction for the planning area. From this input, meetings with interested parties (such as county departments, special interest groups, California Department of Fish and Game, etc.) and discussions with agency staff, a proposed management plan for Death Valley was developed. This proposed plan (alternative 1) is compared with alternative 2 (existing management or the no-action alternative), and with a third optional management approach (alternative 3). Table 1 provides a summary of the actions examined under each alternative. Table 2 is a summary of the primary effects of each action.

After public comments on the proposed action and alternatives are received and considered, the National Park Service will prepare a final environmental impact statement (FEIS). Thirty days after release of the final environmental impact statement a record of decision will be produced. Soon after the record of decision a summary general management plan and land protection plan for the park will be released. These documents will be summary presentations of the management direction arrived at through the public process.

TABLE 1: SUMMARY OF PROPOSED ACTION AND ALTERNATIVES
DEATH VALLEY NATIONAL PARK

	PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL APPROACH (ALTERNATIVE 3)
GENERAL DESCRIPTION OF ALTERNATIVES			
	<ul style="list-style-type: none"> Protecting resources and providing for visitor enjoyment are primary goals. Balance this mission with the other Congressional mandates, such as maintaining grazing and mining under NPS regulations, and continue existence of major utility corridors. Death Valley is a self-sustaining natural environment and a cultural landscape, where native desert ecosystems and processes are assured for future generations. Manage park in a manner to perpetuate the sense of discovery and adventure. Look to adjacent communities to provide most support services and facilities. Provide funding for purchase of property from willing sellers where proposed uses conflict with primary mission. 	<ul style="list-style-type: none"> Follow the existing management approach under <i>1989 General Management Plan</i> and other site-specific planning including the <i>1994 Natural and Cultural Resource Management Plan</i>. These actions are typically referred to as the “status quo” or no action alternative, since this is what would occur if no planning was undertaken. Most of the actions continue policies that are now being followed. 	<ul style="list-style-type: none"> Same as the proposed action, except for differences noted below for visitor use, commercial services and land acquisition.
NATURAL RESOURCES			
	<ul style="list-style-type: none"> Update <i>Natural and Cultural Resource Management Plan</i> to include lands and resources added in 1994. Priority determined through the <i>Strategic Plan</i>. 	<ul style="list-style-type: none"> Manage resources according to enabling legislation and NPS regulations and policies. <i>Natural and Cultural Resource Management Plan</i> in place. Prepare a strategic plan annually. 	<ul style="list-style-type: none"> Same as proposed action.
<i>Air Quality/ Visibility/Night Sky/Noise</i>	<ul style="list-style-type: none"> Participate in adjacent land use planning and monitor the visual, air, night sky, and water resources. Prepare guidelines for the built environment. Maintain productive water resources management program. Maintain proactive water rights protection program including participation in regional water management activities. Continue to compile baseline data on park’s water and water-related resources. 	<ul style="list-style-type: none"> Active air and water monitoring program. Participate in a national air quality network and monitor ozone and particulate matter. Monitor regional water rights issues 	<ul style="list-style-type: none"> Same as proposed action.
<i>Water Rights</i>	<ul style="list-style-type: none"> Park has affirmative responsibility to protect federal reserved water rights. 	<ul style="list-style-type: none"> Preliminary survey of outstanding waters rights has been developed. 	<ul style="list-style-type: none"> Same as proposed action.

	PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL APPROACH (ALTERNATIVE 3)
<i>Water Use</i>	<ul style="list-style-type: none"> • Use water efficiently and frugally. • Continue water-monitoring program. • Continue to monitor Devils Hole water elevation. 	<ul style="list-style-type: none"> • Same as proposed action. 	<ul style="list-style-type: none"> • Same as proposed action.
<i>Water Developments</i>	<ul style="list-style-type: none"> • Examine use of water developments (guzzlers, livestock tanks, and troughs). Keep developments benefiting vegetation and wildlife. • Begin restoring natural water sources. 	<ul style="list-style-type: none"> • Maintenance of existing livestock tanks and troughs allowed with Superintendent's authorization. 	<ul style="list-style-type: none"> • Same as proposed action.
<i>Floodplains/ Wetlands</i>	<ul style="list-style-type: none"> • Occupancy and modification of floodplain and wetland areas would be avoided wherever possible. 	<ul style="list-style-type: none"> • Same as proposed action. 	<ul style="list-style-type: none"> • Same as proposed action.
<i>Paleontological Resources</i>	<ul style="list-style-type: none"> • Continue to encourage active research of park paleontological resources. • Seek to obtain a comprehensive geologic map coverage of the park to delineate geologic areas of paleontological resources. • Increase interpretive program to include paleontological resources. • Continue to patrol backcountry and protect sensitive areas through public closures where appropriate. • Develop comprehensive inventory, monitoring, and database programs. 	<ul style="list-style-type: none"> • Cooperate with researchers to identify paleontological resources. • Most scientific research conducted by entities other than NPS. • Protect resources through random patrols of backcountry, as well as limited public closures to protect sensitive sites. 	<ul style="list-style-type: none"> • Same as proposed action.
<i>Geological Resources</i>	<ul style="list-style-type: none"> • Protect geological features. • U.S. Geological Survey would map renowned exposed geology. 	<ul style="list-style-type: none"> • Same as proposed action. 	<ul style="list-style-type: none"> • Same as proposed action.
<i>Cave Resources</i>	<ul style="list-style-type: none"> • Protect cave resources. 	<ul style="list-style-type: none"> • Same as proposed action. 	<ul style="list-style-type: none"> • Same as proposed action.
<i>Sensitive Species</i>	<ul style="list-style-type: none"> • Protect sensitive species by considering them in all compliance actions. • Continue to manage and protect the 40-acre Devils Hole and its endangered pupfish. • Prepare a plan for the Eureka Dunes area. 	<ul style="list-style-type: none"> • Same as proposed action. 	<ul style="list-style-type: none"> • Same as proposed action.
<i>Introduced Species</i>	<ul style="list-style-type: none"> • No introducing nonnative plants and animals. • Undertake management actions, including eradication of exotic species. • Adopt the "no burro" strategy that exists for the former Monument lands for the new park lands. • BLM has agreed to install boundary fences where burro herds exist adjacent to the park. • Remove burros by a multi-phased approach including live 	<ul style="list-style-type: none"> • No introducing nonnative plants and animals. • Management of burros in the former monument is in the final phase of a three-phased program, with a goal of zero burros. This phase involves the removal of burros by animal protection groups at their expense. This option is being exercised by these groups to avoid implementation of a shooting policy. On new lands added 	<ul style="list-style-type: none"> • Same as proposed action.

	PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL APPROACH (ALTERNATIVE 3)
	<p>capture, adoption, and possible direct reduction of last remaining animals to reach a zero population level.</p> <ul style="list-style-type: none"> Continue removal of tamarisk and hornwort. 	<p>to the park, the NPS has entered into an interim agreement with the BLM to manage the area at previous BLM herd management levels until this management plan is completed.</p> <ul style="list-style-type: none"> Tamarisk eradication part of interagency effort. Hornwort removal at Saratoga Springs ongoing. 	
<i>Disturbed Land Restoration</i>	<ul style="list-style-type: none"> Same as existing management. 	<ul style="list-style-type: none"> Pursue disturbed land restoration wherever funding could be obtained. Require new development proposals, such as mining, which involves disturbance, to restore the land. 	<ul style="list-style-type: none"> Same as proposed action.
<i>Fire Management</i>	<ul style="list-style-type: none"> Formulate desert-wide fire management strategy. Continue assessment of existing fire effects research in desert ecosystems and develop new fire management strategy. Initiate research burns within specific prescriptions and monitor burn sites to assess changes. 	<ul style="list-style-type: none"> Fire Management Plan 1990 goals are: <ul style="list-style-type: none"> Allow fire, as an ecosystem process, to resume its natural role to the fullest practical extent. Eliminate unacceptable environmental impact due to unwarranted fire suppression efforts. Provide for rapid, aggressive and safe suppression of all fires that do not meet management objectives. 	<ul style="list-style-type: none"> Same as proposed action.
<i>Inventorying and Monitoring</i>	<ul style="list-style-type: none"> Updated natural and cultural resources management plan would present a detailed program for managing resources. 	<ul style="list-style-type: none"> Same as proposed action. 	<ul style="list-style-type: none"> Same as proposed action.
<i>Cultural Resources</i>	<ul style="list-style-type: none"> Develop and implement program to identify, inventory, interpret and nominate archeological sites, historic properties, cultural landscapes, and ethnographic resources to National Register of Historic Places. Finalize National Register nominations. Develop and implement a systematic applied cultural resource research program to ensure: (1) adequate baseline information on location, condition, threats, and significance/integrity of resources; (2) accurate interpretation and preservation treatment of resources; and (3) the use of appropriate means to manage, protect, preserve, and interpret Native American heritage or other ethnographic resources. Prepare natural and cultural 	<ul style="list-style-type: none"> Current emphasis on compliance efforts to meet requirements of the National Historic Preservation Act and NPS <i>Cultural Resource Management Guideline</i> Present cultural resource management programs: (1) data collection and inventory of archeological sites, ethnographic resources, and historic properties; (2) intermittent updating of the list of classified structures; and (3) cultural resource studies. 	<ul style="list-style-type: none"> Same as proposed action.

	PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL APPROACH (ALTERNATIVE 3)
	<p>resource management plan to address the requirements, projects, and funding to implement the cultural resource program.</p> <ul style="list-style-type: none"> Develop collaborative partnerships with government agencies, Timbisha Shoshone tribe, and public and private organizations that have cultural resource management or research capabilities or expertise. 		
NATIVE AMERICAN INTERESTS			
	<ul style="list-style-type: none"> <i>1989 GMP</i> management strategy is out of date. The current approach is cooperation and collaboration between the Timbisha Shoshone tribe and the NPS and as appropriate, other DOI agencies. One of the most significant elements of collaboration is the study of land suitability currently underway between the Timbisha Shoshone Tribe and the DOI. A mutually satisfactory and comprehensive approach that would enhance both the tribe's interests and the park has been and is being discussed. This approach is being jointly negotiated and drafted between tribal representatives and NPS and other agencies as appropriate. Park would meet regularly with tribal representatives for government-to-government consultation on local issues and all matters of mutual concern. Based upon a mutually developed approach, the tribe and the park could move forward to greater levels of collaboration and cooperation. This might take the form of the development of communication protocols, coordination procedures, and consultation approaches. NPS will work with tribal representatives to provide appropriate Native American interpretation at park facilities. NPS would work with tribal members to develop skills and data necessary to manage natural and cultural resources. NPS would work with BIA to provide training internships for tribal members. 	<ul style="list-style-type: none"> An informal consultation and agreement process has been followed by Timbisha Shoshone Tribe and the park. Management of village site at Furnace Creek is provided in the <i>1989 GMP</i>. NPS provides water, sewer and garbage collection services to the village site at Furnace Creek, as well as emergency medical services and some law enforcement. Formal and informal agreements have been instituted over the years between the tribe and the park on a variety of matters of joint interest. Some of these involve improvements at the village site such as housing, roads, and water. NPS would take advantage of increased opportunities for government-to-government consultation with the Timbisha Shoshone Tribe. There are multiple opportunities for continued and increased cooperation on a variety of subjects of mutual benefit to the tribe and the NPS. Currently significant efforts are being made, on a government-to-government basis, to conduct a land suitability study between the tribe and DOI agencies. The study includes discussion of opportunities for collaboration and cooperation between all entities. 	<ul style="list-style-type: none"> Same as proposed action.
VISITOR USE, SERVICES AND FACILITIES			
<i>Interpretation</i>	<ul style="list-style-type: none"> Develop Comprehensive 	<ul style="list-style-type: none"> Continue upgrading 	<ul style="list-style-type: none"> Same as proposed action.

	PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL APPROACH (ALTERNATIVE 3)
	<p>Interpretive Plan.</p> <ul style="list-style-type: none"> Continue interpretive services wherever NPS staff can effectively meet with the public to increase their understanding and appreciation of park resources. Expand interpretation regarding Native American activities. 	<p>interpretive waysides within the park in accordance with a wayside exhibit plan prepared by Harpers Ferry Center.</p> <ul style="list-style-type: none"> Continue providing ranger-led walks and talks in interpretive program. Continue to use interpretive prospectus for interpretive guidance and planning. 	
<i>Information/ Orientation</i>	<ul style="list-style-type: none"> Continue to provide information at heavily visited areas, such as Furnace Creek visitor center, Scotty's Castle, and all ranger stations. Provide basic orientation information 24 hours using a variety of methods such as lighted exhibits, brochure dispensers, audio, permanent and portable information. Continue managing staffed information/fee collection stations in Beatty, Nevada and at Stovepipe Wells. Use minimal on-site information/ interpretive services such as signs and interpretive exhibits in the backcountry. Develop unstaffed orientation/ information stations ("reception centers") along the park's five major entrance roads in association with proposed and existing fee collection stations. Plan for unstaffed orientation kiosks in conjunction with the stations. Post signs or exhibits at key intersections. Continue to upgrade interpretive wayside exhibits in accordance with a wayside exhibit plan. Cooperate with other agencies and organizations to make information available along approach routes to the park. 	<ul style="list-style-type: none"> Provide information at existing visitor facilities identified above. Continue to provide visitors with information at ranger stations (Grapevine, Beatty, Stovepipe Wells, and Wildrose) and operate with volunteer staff as available. Provided information via park internet homepage. Continue to assist visitors approaching the park from I-15 at Mojave National Preserve's Baker visitor center. 	<ul style="list-style-type: none"> Same as proposed action.
<i>Visitor Facilities</i>	<ul style="list-style-type: none"> Continue to operate major visitor centers at Furnace Creek and Scotty's Castle, and support interagency information centers. Improve interpretive displays at Furnace Creek visitor center and provide more displays to include information on recently acquired lands. Provide comprehensive design packages for visitor facilities that would strive to balance resource 	<ul style="list-style-type: none"> Continue managing major visitor centers at Furnace Creek and Scotty's Castle. Continue supporting multi-agency information center at Lone Pine. 	<ul style="list-style-type: none"> Same as proposed action.

	PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL APPROACH (ALTERNATIVE 3)
	<p>protection with visitor access and safety, minimize impacts on sensitive resources, and improve the visual quality of the areas and overall visitor experience.</p> <ul style="list-style-type: none"> • Provide improvements at key attractions such as Badwater or especially sensitive natural and/or cultural resources such as Eureka Dunes and Devils Hole to protect resource values. • Treat cultural and natural resource sites that are easily accessible and significant as interpretive stops. 		
<i>Developed Campgrounds</i>	<ul style="list-style-type: none"> • Improve existing campgrounds by eliminating safety hazards, better defining and separating sites, improving restrooms, and adding amenities (water faucets, picnic tables). • Relocate Stovepipe Wells campground and reduced its size. Demolish and replace the current information center as part of the highway relocation. • Redesign the Sunset, Texas Spring, and Furnace Creek campgrounds to accommodate average winter demand and improve camping conditions. • Redesign all RV campgrounds to meet national fire codes that allow a maximum of 30 RVs per acre. 	<ul style="list-style-type: none"> • Currently maintain nine developed campgrounds offering approximately 1,500 campsites. • Smaller campgrounds or parts of campgrounds may be eliminated if situations arise where threats to visitor health and safety can not be mitigated. • No new campgrounds planned. 	<ul style="list-style-type: none"> • Same as existing management except, close Emigrant campground because of the flood hazard.
<i>Recreational Day Use Activities</i>	<ul style="list-style-type: none"> • Same as existing management. 	<ul style="list-style-type: none"> • Support day use activities that are compatible with park management objectives and current visitor needs. • Continue to prohibit recreational activities that would involve or result in: <ul style="list-style-type: none"> • inconsistency with the park's enabling legislation or proclamation, or derogation of the values or purposes for which the park was established • unacceptable impacts on visitor enjoyment due to interference or conflict with other visitor use activities • consumptive use of park resources • unacceptable impacts on park resources or natural processes • unacceptable levels of danger to the welfare or safety of the public, 	<ul style="list-style-type: none"> • Same as existing management.

	PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL APPROACH (ALTERNATIVE 3)
		including participants	
<i>Backcountry and Roadside Camping</i>	<ul style="list-style-type: none"> Establish small, primitive campsites in some remote areas of the park to offer alternative camping experiences. Designate specific campsites in some areas to protect sensitive resources. Complete backcountry/wilderness management plan to provide specific guidance. 	<ul style="list-style-type: none"> Continue to prepare a backcountry/wilderness management plan that would address the broad changes in the amount of the park that is now designated as wilderness. Currently there are over 350 miles of backcountry roads that are open to camping with an unknown number of informal campsites. 	<ul style="list-style-type: none"> Same as proposed action.
<i>Backcountry Cabins</i>	<ul style="list-style-type: none"> Same as existing management. Possibly revise management direction for some structures according to results of inventory. 	<ul style="list-style-type: none"> Visitors can use cabins on a first come, first serve basis according to interim management direction. Limit length of stay to 30 days. Prepare a survey and conduct inventory of cabins within the park. 	<ul style="list-style-type: none"> Same as existing management.
<i>Visitor Use in Saline Valley</i>	<ul style="list-style-type: none"> A site plan would be prepared for the Lower and Palm Spring areas to provide specific guidance on facilities and other improvements related to visitor use. Roadside camping would not be permitted from the Saline Valley Road to the junction with the Chicken Strip access road. A parking lot would be established near the junction of the Chicken Strip access road. Designated walk-in campsites would be established near the springs. The Saline Valley Road would be maintained to its current surface condition by Inyo County. The Upper Springs would continue to be protected from human improvements and use from burros. Hot tubs/spas would be limited to the current level of improvements. The Chicken Strip and Tail Dragger airstrips would be closed. 	<ul style="list-style-type: none"> Saline Valley Warm Springs has pit toilets, fire grills, shower, hot tubs and picnic tables that have been installed and maintained by the public using the springs. Roadside camping is allowed. Vehicle use around springs not restricted. The park's 30-day camping limit applies. The Saline Valley Road is maintained by Inyo County. A volunteer camp host provides some visitor services and communications with the park. The Chicken Strip airstrip remains open, but is not designated as such per DOI standards. The Tail-Dragger airstrip is closed. 	<ul style="list-style-type: none"> All areas within the Eureka-Saline wilderness road corridor would be open for roadside camping. Designated car camping sites would be established in the area of springs. The Chicken Strip airstrip would remain open; this would require a special regulation in 36CFR as well as adequate safety and maintenance work. The Tail-Dragger airstrip would be examined for reopening. Road maintenance, between Saline Valley Road and Lower Warm Springs, trash pick up and removal, toilets and all other maintenance functions at the warm springs would continue to be done by user groups under agreements with the park. A volunteer camp host system would continue to provide visitor services.
<i>Visitor Use Fees</i>	<ul style="list-style-type: none"> In addition to the methods currently employed and being developed, the park would explore the possibility of fee collection by third parties. 	<ul style="list-style-type: none"> Entrance fees are presently collected at the Furnace Creek visitor center, the Grapevine Entrance Station, Beatty, Stovepipe Wells, and Baker. Fees are also collected at 	<ul style="list-style-type: none"> Same as proposed action.

	PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL APPROACH (ALTERNATIVE 3)
		<p>the developed campgrounds, and for other activities such as commercial use permits, filming, and camping.</p> <ul style="list-style-type: none"> The park is considering construction of other entrance stations. 	
<i>Commercial Services</i>	<ul style="list-style-type: none"> No change to current commercial services. 	<ul style="list-style-type: none"> Overnight lodging is provided by concessions or private businesses at Furnace Creek, Stovepipe Wells and Panamint Springs, as well as food service at Scotty's Castle. The park has no plans for new commercial services. 	<ul style="list-style-type: none"> Same as proposed action.
GENERAL DEVELOPMENT CONCEPTS			
	<p>In addition to the existing management:</p> <ul style="list-style-type: none"> An historic resources study/cultural landscape report and a DCP for Scotty's Castle would be prepared. A DCP for Furnace Creek and Cow Creek would be prepared as a combined document. Complete DCP for the Grapevine Area which is underway to address the following: <ul style="list-style-type: none"> Employee housing would be improved and temporary facilities would be eliminated. Some NPS and concessionaire employees now residing at Scotty's Castle would be relocated to Grapevine. A small community building and recreation facilities would be provided. Some maintenance functions could be relocated from Scotty's Castle. Museum quality items now stored in various buildings at Scotty's Castle would be moved into a climate-controlled structure at Grapevine or another location, to ensure their preservation. 	<ul style="list-style-type: none"> A DCP for Grapevine is underway. 	<ul style="list-style-type: none"> Same as proposed action.
ROADS AND CIRCULATION			
	<ul style="list-style-type: none"> Highway 190 would be realigned at Stovepipe Wells. The current road management plan for the park would be reevaluated because of changes in visitor use patterns, increased number of buses entering the park, the addition of more roads from park expansion and a need to readjust maintenance priorities in 	<ul style="list-style-type: none"> Currently, the park maintains 243 miles of standard paved or unpaved road and 442 miles of high clearance roads. California state maintains Highway 190 that traverses the park. Inyo County maintains about 75 miles of paved and 	<ul style="list-style-type: none"> Same as proposed action.

	PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL APPROACH (ALTERNATIVE 3)
	<p>reaction to funding levels.</p> <ul style="list-style-type: none"> The plan would determine such things as the status of duplicate road sections, road surface conditions and the appropriate level of maintenance. 	<p>non-paved roads in the park.</p> <ul style="list-style-type: none"> Little or no maintenance is performed on high clearance and four wheel drive backcountry roads. However, emergency repairs may be undertaken following flash floods. Vehicle use in the park is limited to street legal vehicles and no off road driving is permitted. 	
<i>Trails</i>	<ul style="list-style-type: none"> Same as existing management with the addition of installing trailhead orientation signs at all key trailheads. 	<ul style="list-style-type: none"> Backcountry/wilderness management plan would address trail use by hikers, equestrian, bicycles, and people with disabilities. Hikers are allowed on all open trails, while most backcountry trails are open to stock use. Heavily used pedestrian walks or trails are not open to stock use. Bicycles are not allowed on trails or in wilderness. 	<ul style="list-style-type: none"> Same as proposed action.
<i>Signs</i>	<ul style="list-style-type: none"> Keep same philosophy as in existing management. Keep secondary or backcountry roads with minimal directional, instructive, or interpretive signs. Construct new signs only to keep new visitors from becoming lost and allow the backcountry roads to remain lightly traveled. 	<ul style="list-style-type: none"> Sign philosophy is to keep signs unobtrusive and to blend with the natural environment. Provide maps and other media to reduce need for signs. 	<ul style="list-style-type: none"> Same as proposed action.
ADMINISTRATIVE OPERATIONS AND FACILITIES			
<i>Park Administration</i>	<ul style="list-style-type: none"> More efficient administrative facilities are needed at Furnace Creek, Grapevine, Scotty's Castle and Wildrose. Ongoing or proposed DCPs would address improvements to facilities. Facilities and staff that are not essential for visitor and resource protection, visitor facility maintenance, and cultural and natural resources interpretation would be considered for relocation to sites outside of the park. 	<ul style="list-style-type: none"> Park headquarters, administrative, resource management, visitor and resource protection, interpretive, and maintenance staff, buildings, and employee housing would remain in the existing Furnace Creek, Cow Creek, Grapevine, Scotty's Castle, Stovepipe Wells, and Wildrose areas of the park. 	<ul style="list-style-type: none"> Same as proposed action.
<i>Employee Housing</i>	<ul style="list-style-type: none"> A Housing Management Plan is being prepared. Housing plans would be coordinated with the future direction of administrative facilities. Proposed DCP for Furnace Creek/Cow Creek would consider possibility of moving some functions outside park, therefore reducing need for additional in- 	<ul style="list-style-type: none"> The majority of the park staff live at the Cow Creek housing area. As of 1998, there are 59 housing units and 33 transient trailer sites at this location. Ongoing DCP at Grapevine would consider trailer and housing replacement at that location. 	<ul style="list-style-type: none"> Same as proposed action.

	PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL APPROACH (ALTERNATIVE 3)
	park housing.		
<i>Solid Waste Disposal</i>	<ul style="list-style-type: none"> Same as existing management. 	<ul style="list-style-type: none"> Solid waste disposal is hauled to an approved landfill outside of the park. 	<ul style="list-style-type: none"> Same as existing management.
LAND OWNERSHIP AND USE			
	<ul style="list-style-type: none"> The park would continue to regulate nonfederal rights on federal lands through existing laws and regulations, while pursuing acquisition. 	<ul style="list-style-type: none"> The park regulates nonfederal rights on federal lands through existing laws and regulations. 	<ul style="list-style-type: none"> The park would continue to regulate nonfederal rights on federal lands through existing law and other regulations, while pursuing acquisition in sensitive areas.
<i>Park Boundary</i>	<ul style="list-style-type: none"> No changes in the boundary of the park are proposed. 	<ul style="list-style-type: none"> Final boundary map and legal description submitted to Congress. Park acreage approximately 3,396,172. 	<ul style="list-style-type: none"> Same as proposed action.
<i>Wilderness</i>	<ul style="list-style-type: none"> Manage wilderness for maximum statutory protection, per CDPA. Prepare backcountry/wilderness management plan. Expand information signing per Wilderness Act requirements. 	<ul style="list-style-type: none"> Wilderness management focused on overflights, horse patrols, and backcountry road patrols on open wilderness corridors to identify illegal uses. Approximately 95% of the park designated wilderness. 	<ul style="list-style-type: none"> Same as proposed action.
<i>Land Acquisition</i>	<ul style="list-style-type: none"> A land protection plan would provide direction for land acquisition. The NPS would seek funds to acquire private lands and interests in the park. Private land at Furnace Creek and Panamint Springs would be acquired if requested by the owners. Donations and exchanges are pursued from willing sellers and third party acquisitions from willing sellers are encouraged. Exchange of State School sections would continue per CDPA direction. 	<ul style="list-style-type: none"> NPS purchase of private lands and interests in the park is not an ongoing or active program. Donations and exchanges are pursued from willing sellers, and third party acquisitions from willing sellers are encouraged. Exchange of State School sections ongoing per CDPA direction. 	<ul style="list-style-type: none"> Same as proposed action, except: Private lands or interests would only be acquired on an opportunity basis if the NPS were approached by a landowner wanting to sell, the interest was located in a sensitive area, or a development project would adversely affect park resources.
<i>Mineral Development Activities</i>	<ul style="list-style-type: none"> Same as existing management. 	<ul style="list-style-type: none"> The CDPA withdrew the park from all location, entry and patent under the mining laws, and from mineral and geo-thermal leasing and mineral materials sales, subject to valid existing rights. NPS would regulate mineral development on valid mining claims in accordance with 36 CFR Part 9A. Where proposed development fails to meet 9A approval standards and no alternative development scenario is feasible, the NPS would 	<ul style="list-style-type: none"> The NPS would prepare a minerals management plan that analyzes sensitive resource values and the potential impacts of likely mineral development scenarios. Where mineral development would significantly conflict with resource values, the NPS would seek funding to acquire the mineral rights. Until funds were appropriated, proposed mining operations would be evaluated under NPS regulations at 36 CFR Part

	PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL APPROACH (ALTERNATIVE 3)
		initiate acquisition. <ul style="list-style-type: none"> Building materials, (sand, gravel, cinder, etc.) geo-thermal resources and oil and gas on federal lands are not available for extraction or sale. 	9A as under existing management.
<i>Abandoned Mines</i>	<ul style="list-style-type: none"> The NPS would seek funding to complete an abandoned mineral lands inventory on the expanded park lands and develop reclamation plans. Death Valley would implement remediation, stabilization, and restoration program on AML sites as funding is available. 	<ul style="list-style-type: none"> The park has completed a historic study of mining properties in the old monument lands. No detailed inventory of hazards or reclamation needs has been done. 	<ul style="list-style-type: none"> Same as proposed action.
<i>Sand and Gravel for Road Maintenance</i>	<ul style="list-style-type: none"> Use of borrow materials for road maintenance would be evaluated in road management plan. 	<ul style="list-style-type: none"> Use of borrow materials for road maintenance must conform to existing NPS policy that requires materials to be obtained from nonpark sources, unless economically infeasible. 	<ul style="list-style-type: none"> Same as existing management.
<i>Grazing/Range Management</i>	<ul style="list-style-type: none"> Grazing privileges would continue to be managed under NPS regulations, policies, and park management direction at no more than the level as of October 31, 1994. The superintendent would determine appropriate use, restrictions, and grazing fees. NPS would allow appropriate maintenance of existing range developments. The small portions of the Eureka Valley and Lacey-Cactus-McCloud allotments that the park acquired would be closed to grazing. An allotment management plan would be prepared by the NPS for active grazing allotments. The CDPA directs the Secretary to make the acquisition of "base property" from willing sellers a priority above all other acquisitions in the park. 	<ul style="list-style-type: none"> Grazing is not permitted within the former Monument. The CDPA provides that the privilege of grazing cattle on lands within the park shall continue to be exercised at no more than the current level as of October 31, 1994, subject to applicable NPS regulations, policies and park management direction. Two permitted allotments totaling about 2700 AUMs. Grazing fees received by the NPS based on the BLM's fee schedule (\$1.35/AUM). 	<ul style="list-style-type: none"> Same as proposed action.
PLAN IMPLEMENTATION			
	<ul style="list-style-type: none"> This draft <i>General Management Plan</i> identifies further activity level planning needed to guide management of the park. Phased schedule provided for additional planning. Burro removal and grazing management strategies to begin immediately. 	<ul style="list-style-type: none"> Priorities for allocation of staff and funding determined on a year by year basis using the Strategic Planning Process. Strategic plan sets five-year planning goals that could be revised and adjusted yearly. Staff and funding adjusted as needed to place resources 	<ul style="list-style-type: none"> Same as proposed action.

	PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL APPROACH (ALTERNATIVE 3)
		<p>where most appropriate to meet the demands.</p> <ul style="list-style-type: none"> Activity level planning would be pursued, with most of the identified plans being completed within the next five years. 	
<i>Staffing and Funding</i>	<ul style="list-style-type: none"> Increase in park operating base of \$1.7 million and 37 staff needed to fully implement GMP. Implementation of developments and improvements estimated at \$26.8 million. 	<ul style="list-style-type: none"> Park FY98 operating base is \$5,337,000. Existing staffing 108. 	<ul style="list-style-type: none"> Same as proposed action.

TABLE 2. SUMMARY OF IMPACTS
DEATH VALLEY NATIONAL PARK

PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL ALTERNATIVE (ALTERNATIVE 3)
IMPACTS ON NATURAL ENVIRONMENT		
<ul style="list-style-type: none"> • NPS participation in adjacent land use planning would benefit the visual, air, night sky, and water resources of the park. • As non-natives (burros, tamarisk) are removed, natural water flow, wildlife, soil, and vegetation would benefit. • Short term negative effects to soils and natural quiet may occur during burro roundups. • Designated campsites and closure of others within sensitive habitat would reduce negative impacts to soil, water, and other sensitive resources. • The site management plan for Saline Valley would provide guidance in the protection and restoration of the natural resources of the area, including removal of exotic species and restoration of vegetation. • Potential purchase of grazing permits and their subsequent retirement would benefit native vegetation, wildlife, soil and water resources. 	<ul style="list-style-type: none"> • Most negative impacts to the natural environment are due to the presence of burros and tamarisk. These impacts include: damage to soil crusts, reduced water infiltration, inhibit nitrogen fixation in desert plants, provide a favorable seed bed for exotic annuals, soil compaction, destruction to natural springs, and destruction to native vegetation. • Vegetation is affected to varying degrees by non-native burro tamarisk, and by unrestricted camping activities like at Saline Valley. • Burros are known to contaminate water sources (through defecation and urination), over-browsing, elimination of aquatic and riparian vegetation and monopolizing the use of springs or seeps. • Developed water (guzzlers, mining and livestock water developments) may be affecting native wildlife populations by allowing some populations to grow to levels unobtainable with available natural water. • Mining or agriculture activities on private or state lands and mining claims could negatively impact natural resources. 	<ul style="list-style-type: none"> • Same as proposed action, except: • The desert environment would not be restored near the Chicken Strip. • Designation of campsites at Saline Warm Springs would result in less damage to the landscape and would have a positive impact for the desert environment.
IMPACTS ON CULTURAL RESOURCES		
<ul style="list-style-type: none"> • Archeological resources, historical properties, cultural landscapes and ethnographic resources would benefit from an expanded systematic inventory, research and preservation program. • Reduced damage to archeological resources with burro removal. • Development of a site management for the Saline Valley area would identify cultural resources and recommend methods to protect and interpret them. • Additional mining related cultural resources potentially important to the history of the park could be acquired. 	<ul style="list-style-type: none"> • Cultural resources are potentially threatened by burros trampling and by visitor camping, vandalism, illegal acts such as artifact collecting or driving near isolated and unprotected sites. • Historic properties listed on, or determined eligible for listing on, the National Register would continue to be afforded stabilization/ preservation treatment as funding allows. • Impacts from recreational use on cultural resources in the Warm Springs area of Saline Valley are unknown, but potentially significant. • The NPS is unable protect historic and archeological features on 	<ul style="list-style-type: none"> • Same as proposed action.

PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL ALTERNATIVE (ALTERNATIVE 3)
	private lands against decay and vandalism.	
IMPACTS ON NATIVE AMERICAN INTERESTS		
<ul style="list-style-type: none"> • NPS commitment to improved government-to-government consultation and collaboration with tribal representatives, including the current land suitability study and other subjects of common interest would likely improve relationships with the tribe and help resolve some long-standing issues. • Development of mutually satisfactory approaches to concerns between the tribe and the NPS will likely increase the ultimate cooperation between the tribe and the NPS. Expanded cooperation and collaboration should provide significant benefits to both the park and the tribe. • The tribe would be able to pursue construction of additional housing and other amenities to provide a more suitable living situation for tribal members. 	<ul style="list-style-type: none"> • Informal communication works well on many issues. A more structured process, however might well result in greater opportunities for collaboration and cooperation. • Native American interests could be better identified and considered in park decision making. 	<ul style="list-style-type: none"> • Same as proposed action.
IMPACTS ON VISITOR USE, SERVICES, AND FACILITIES		
<ul style="list-style-type: none"> • As burro numbers are reduced, there would be fewer opportunities to see burros in the park. Some people would be upset over the direct reduction of last few burros. • To others, as the damaged habitat recovers, seeing fewer burros would be viewed as a positive impact. • Access for people with disabilities to trails and campsites would improve their opportunities for use of the campgrounds. • Changes proposed for the Saline Valley area with an increased NPS presence in the area's operations and maintenance may seem to create too structured an operation to some of the Saline Valley Warm Springs advocate groups. • Closing the Chicken Strip airstrip would negatively affect people who visit by plane. • Increased NPS management in the Saline Valley could help maintain its qualities by protecting the resources from potential increases in visitation and unmanaged visitor activities. • As private and state lands are purchased, more public lands would be available for visitor use and less incompatible development activities would occur in the park. 	<ul style="list-style-type: none"> • Some visitor's experience would be affected by viewing cattle ranching, burros, mining, guzzlers, and stock tanks. • Saline Valley's existing management would continue, with consequent resource impacts. • The Saline Valley Road would continue to get occasional maintenance from Inyo County. • The Chicken Strip airstrip would remain open. • Visitors would encounter mining development activities, sometimes in designated wilderness, that may appear to some as a conflict with the park's conservation purpose. 	<ul style="list-style-type: none"> • Same as proposed action, except: • The Chicken Strip airstrip would remain open for planes.

PROPOSED ACTION (ALTERNATIVE 1)	EXISTING MANAGEMENT (ALTERNATIVE 2)	OPTIONAL ALTERNATIVE (ALTERNATIVE 3)
IMPACTS ON SOCIOECONOMIC ENVIRONMENT		
A separate analysis of socioeconomic conditions in the planning area and the effects of the proposed action was conducted by Dean Runyan Associates under contract to the NPS. That analysis concluded that no significant effects would occur in the NEMO planning area as a result of the proposed action. There would be some loss of grazing related jobs if allotments were acquired, but the overall effect would be offset by an increase in tourism jobs.		
IMPACTS ON ADMINISTRATIVE OPERATIONS AND FACILITIES		
<ul style="list-style-type: none"> Burro removal would increase short-term park costs and staff time (about \$410,000 not counting staff time). Grazing fees use would be limited to resource management projects and management of the grazing program. For Saline Valley, funding would be needed to make campsite improvements, to provide facilities and resource protection, to develop a site management plan, and for increased maintenance costs. With the possible relocation of some NPS services outside of the park, there would be increased transportation time and expenses for employees who occasionally have to work in the park. Housing opportunities would increase for employees living outside the park, and demand on park housing would not increase. There would be a large initial administrative workload and cost to acquire properties. However, this workload would diminish over time as nonfederal lands and interests are brought under public ownership. 	<ul style="list-style-type: none"> The estimated cost for capture, transporting, adoption preparation and adoption for 51 burros per year would average about \$61,000. There are additional costs for trespass burros that enter the park from adjacent BLM HMAs. There are minor costs for administering wilderness access and guzzler maintenance. Grazing fees collected under the existing management are not sufficient to manage a grazing program. Additional funding would be needed. Campground administration support would be continued with staff and volunteers managing campgrounds. NPS would have to make a special designation of the Chicken Strip airstrip under the NPS regulations (36 CFR). All workloads would increase, limiting NPS' ability to serve the public and protect resources. Some employee housing would remain inadequate and below reasonable standards. 	<ul style="list-style-type: none"> Same as proposed action, except: NPS would have to make a special designation of the Chicken Strip airstrip under the NPS regulations (36 CFR).
IMPACTS ON LAND OWNERSHIP AND USE		
<ul style="list-style-type: none"> Restrictions on grazing activities and ranching practices could affect allotment value. Grazing fees could increase. Acquisition of mining properties that do not meet NPS regulatory approval standards would permanently remove those sites from potential mineral development, reducing the total amount of available mineral resources in the region that may be developed. 	<ul style="list-style-type: none"> Burros continue to use ranchers' water and forage allocated for cattle. The park would regulate nonfederal rights through existing laws and regulations. Purchases of nonfederal properties are not actively pursued, but may occur on an opportunity basis from willing sellers. 	<ul style="list-style-type: none"> Same as proposed action, except: Private land or interests would only be acquired in sensitive resource areas from willing sellers, or if a development project would adversely affect park resources. Increased acquisition of mineral rights would occur as a result of the sensitive resource analysis and the identification of areas where mineral development would be incompatible with the park mission.